

WHAT IS CLAIMED IS:

1. A domain-wall-displacement magneto-optical recording medium, comprising:

a displacement layer in which domain walls are displaced and rare-earth-element sub-lattice magnetization is dominant at room temperature;

a memory layer for holding recorded magnetic domains;

a switching layer provided between said displacement layer and said memory layer that has a Curie temperature lower than Curie temperatures of said displacement layer and said memory layers; and

a magnetization compensation layer having a composition such that iron-family-element sub-lattice magnetization is dominant at room temperature, whereby information is reproduced by magnifying the recorded magnetic domains transferred from said memory layer to said displacement layer, by displacing domain walls of the recorded magnetic domains; and

2. A recording medium according to Claim 1, wherein said magnetization compensation layer is a sub-layer of said displacement layer

3. A recording medium according to Claim 1, wherein said magnetization compensation layer is provided at a side of said memory layer opposite to a side where said switching layer is provided, and is not direct exchange coupled to said memory layer.

4. A recording medium according to Claim 3, wherein a Curie

temperature of said magnetization compensation layer is within a range of ± 20 °C with respect to a temperature at which total magnetization of all magnetic layers other than said magnetization compensation layer is substantially zero.

5. A recording medium according to Claim 3, wherein a thickness of said magnetization compensation layer is within a range of 15 – 20 % with respect to a total thickness of all magnetic layers other than said magnetization compensation layer.

6. A recording medium according to Claim 1, wherein said recording medium has a plurality of recording tracks, and wherein coupling by exchange interaction in a direction of a surface of at least said displacement layer is disconnected or mitigated at both side portions of each of said plurality of recording tracks.